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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,945	01/31/2001	Sugitaka Oteki	202507US2	1573

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EXAMINER

POON, KING Y

ART UNIT PAPER NUMBER

2624

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/772,945

Applicant(s)

OTEKI ET AL.

Examiner

King Y. Poon

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 3-5, 8-10, 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 7 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/31/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 3-5, 8-10, 12, 13 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/25/2005.

2. Applicant's election with traverse of restriction requirement in the reply filed on 10/25/2005 is acknowledged. The traversal is on the ground(s) that 1) the reason that fig. 9, 10; fig. 11, 12; and fig. 13, 14 belong to different species is not being given by the examiner and 2) examining the entire application can be made without serious burden. This is not found persuasive because:

1) Embodiment I is an invention being carried out in a compression unit. Embodiment II, III is an invention being carried out in a data decompression unit. Clearly decompression and compression are different and mutually exclusive. Embodiment II and III are different species because the applicant has admitted that they are different species (embodiment) as disclosed in applicant's specification, page 15, lines 19-25, page 16, lines 1-8.

2) Decompression require the search of class 382/233; compression requires the search of area 358/426.13, 426.14; switch (embodiment II) requires the search of area 710/316, 370/352; and extraction (embodiment III) requires the search of area 702/70. The above are examples of non-overlapping search area.

Furthermore, since the inventions are different species, the best prior art for invention I, the best prior art for invention II, and the best prior art for invention III are all

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different. The search for invention I is completed would require further search for invention II and vice versa, the search for invention I is completed would require further search for invention III and vice versa, and the search for invention II is completed would require further search for invention III and vice versa. Therefore, the search and examination of the entire application cannot be made without serious burden.

The requirement is still deemed proper and is therefore made FINAL.

3. Applicant is advised that should claims 1, 2 be found allowable, claims 6, 7 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 1, 2, 6, 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1: It is unclear "the image data of pixels divided by said dividing unit" of line 7 is the "the image data of pixels divided by the dividing unit" after being stored or before being stored by the storage unit of lines 4-5.

Regarding claim 6: It is unclear "the image data of pixels divided by said dividing means" of line 7 is the "the image data of pixels divided by the dividing means" after being stored or before being stored by the storage means of lines 4-5.

Claims 2, 7 are rejected under 35 U.S.C. 112, second paragraph because they depend on rejected claims 1, 6.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Okino (US 5,754,705).

Regarding claim 11: Okino teaches an image processing method comprising the steps of: dividing image data into $m \times n$ pixels, having n lines with m pixels per one line (column 2, lines 50-67); storing the image data of pixels (column 3, lines 5-10) which are divided by said dividing step; providing a control (since the dividing and storing and sending image data from one place to another requires control; controlling is inherent) so as to send the image data of pixels divided by said dividing step, and the image data

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stored by said storing step, respectively, to a predetermined destination (column 3, lines 30-50); batch compressing the image data of $m \times n$ pixels (column 3, lines 35-40), wherein said providing step sends $(n-1)$ lines of image data among dividing step to said storing step, and the remaining one line of image data directly to said compressing step; and image data of $m \times n$ pixels divided by said controls sending of the image data of $m \times (n-1)$ pixels stored said storage step to said compressing step (column 3, lines 30-50).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2, 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okino (US 5,754,705).

Regarding claims 1, 6: Okino teaches an image processor (image processing system, column 1, lines 10-15) comprising: a dividing unit (shift register divided the pixel in m rows (lines) and each rows has n pixels, column 2, lines 60-67) which divides image data into $m \times n$ pixels, having n lines with m pixels per one line; a storage unit (306, column 3, line 1) which stores the image data of pixels, (column 3, lines 1-5) which are divided by said dividing unit; sending the image data of the image data of pixels divided by the dividing unit, and the image data stored by said storage unit, respectively, to a predetermined destination (the compression processor, column 3,

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lines 30-41); a compression unit (307, column 3, lines 18-21) which batch compresses the image data of $m \times n$ pixels, wherein $(n-1)$ lines of image data among the image data of $m \times n$ pixels divided by said dividing unit are being send to said storage unit, and the remaining one line of image data are being send directly to said compression unit; and sending the image data of $m \times (n-1)$ pixels stored in said storage unit to said compression unit (column 3, lines 30-41).

Okino, while discussion the well known conventional invention, does not disclosed a control unit for controlling the image processor.

However, Okino, in column 5, lines 15-30, teaches to use a controlling unit to control the entire image processor in his invention:

Since the conventional invention discussed by Okino is not controlled by human, it requires some kind of controlling device to control the timing of the operation.

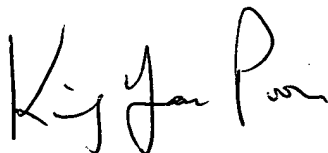
Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the conventional invention to include: controlling unit to control the entire image processor in order for the conventional invention (image processor) to be properly functioning.

Regarding claims 2, 7: Okino teaches wherein said storage unit comprises $(n-1)$ number of FIFO memories (column 3, lines 40-50), and said control unit controls sending of each line of the image data divided by said dividing unit to said FIFO memories (column 3, lines 5-16), respectively.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (571) 272-7440.

3/31/05

A handwritten signature in black ink, appearing to read "King Y. Poon". The signature is written in a cursive, flowing style.

**KING Y. POON
PRIMARY EXAMINER**